

**AUTHORIZATION TO DISCHARGE UNDER THE  
COLORADO DISCHARGE PERMIT SYSTEM**

In compliance with the provisions of the Colorado Water Quality Control Act, (25-8-101 et seq., CRS, 1973 as amended), for both discharges to surface and ground waters, and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq.; the "Act"), for discharges to surface waters only, the

**XTO Energy Incorporated**

is authorized to discharge from the **Golden Eagle, Apache Canyon, and (portions of) Hill Ranch Coalbed Methane Operation to: Tributaries to the South and Middle Fork of the Purgatoire River, Tributaries to the Purgatoire River, and the Purgatoire River.**

in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I and II hereof. All discharges authorized herein shall be consistent with the terms and conditions of this permit.

The applicant may demand an adjudicatory hearing within thirty (30) days of the date of issuance of the final permit determination, per the Colorado Discharge Permit System Regulations, 61.7(1). Should the applicant choose to contest any of the effluent limitations, monitoring requirements or other conditions contained herein, the applicant must comply with Section 24-4-104 CRS and the Colorado Discharge Permit System Regulations. Failure to contest any such effluent limitation, monitoring requirement, or other condition, constitutes consent to the condition by the Applicant.

This permit and the authorization to discharge shall expire at midnight January 31, 2015 .

Modified, Reissued and Signed this 15th day of November, 2012

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT



Janet Kieler, Permits Section Manager  
Water Quality Control Division

**Permit Actions Summary:**

**Modification #4- Minor Modification Issued November 15, 2012, Effective December 1, 2012 (Part I.A.2., Part I.B.2.)**

**Modification #3- Minor Modification Issued July 24, 2012, Effective September 1, 2012 (Part I.A.2)**

**Modification #2- Minor Modification Issued June 22, 2010, Effective July 1 (Parts I.A and Part I.B)**

**Modification #1- Minor Modification – Issued January 29, 2010, Effective February 1, 2010 (Parts I.A., Part I.B, Part I.C., and Part I.D)**

**Originally Issued December 30, 2009 and Effective February 1, 2010.**

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## PART I

### A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

#### 1. Effluent Limitations

Beginning no later than the effective date of this permit and lasting through the expiration date, the permittee is authorized to discharge from the following outfalls;

001G-080G, 079H-080H, 087H, 001A, 004A-008A, 010A, 014A-019A, 022A-023A 030A, 032A-034A, 036A 039A-040A, 044A, 046A, 047A, 049A-050A, 060A

Outfall FLOW: This outfall will be used to record the total flow from all outfalls.

In accordance with the Water Quality Control Commission Regulations for Effluent Limitations, Section 62.4, and the Colorado Discharge Permit System Regulations, Section 61.8(2), 5 C.C.R. 1002-61, the permitted discharge shall not contain effluent parameter concentrations which exceed the following limitations specified below or exceed the specified flow limitation.

#### 2. Monitoring Frequency and Sample Type

In order to obtain an indication of the probable compliance or noncompliance with the effluent limitations specified in Part I.A, the permittee shall monitor all effluent parameters at the following frequencies. Such monitoring will begin immediately and last for the life of the permit unless otherwise noted. The results of such monitoring shall be reported on the Discharge Monitoring Report form (See Part ID.)

Self-monitoring sampling by the permittee for compliance with the monitoring requirements specified above shall be performed at the outfall noted above.

If the permittee, using an approved analytical method, monitors any parameter more frequently than required by this permit, then the results of such monitoring shall be included in the calculation and reporting of the values required in the Discharge Monitoring Report Form (DMRs) or other forms as required by the Division. Such increased frequency shall also be indicated.

Oil and Grease Monitoring: For every outfall with oil and grease monitoring, in the event an oil sheen or floating oil is observed, a grab sample shall be collected, analyzed, and reported on the appropriate DMR. In addition, corrective action shall be taken immediately to mitigate the discharge of oil and grease. A description of the corrective action taken should be included with the DMR.

Outfall FLOW

<u>Effluent Parameter</u>	<u>Effluent Limitations Maximum Concentrations</u>				<u>Monitoring Requirements</u>	
	<u>30-Day Average *</u>	<u>7-Day Average *</u>	<u>Daily Maximum *</u>	<u>2-Year Average *</u>	<u>Frequency</u>	<u>Sample Type</u>
Effluent Flow (MGD)	2.1		Report		Quarterly	Calculated

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**Outfalls to COARLA05a Tributaries: Golden Eagle (G) 008G- 011G, 030G, 040G-041G, 043G; Hill Ranch (H) 079H-080H, 087H; Apache Canyon (A) 001A, 004A-008A, 010A, 015A-019A, 022A, 023A, 030A, 032A-034A, 036A, 039A-040A, 044A, 046A, 047A (DPAC-048), 049A (DPAC-050), 050A (DPAC-051)**

Effluent Parameter	Effluent Limitations Maximum Concentrations				Monitoring Requirements	
	30-Day Average	7-Day Average	Daily Maximum	2-Year Average	Frequency	Sample Type
Effluent Flow (MGD)	Report		Report		Quarterly	Instantaneous
pH (su)			6.5-9		Quarterly	Grab
TSS (mg/l)	30	45			Quarterly	Grab
TDS (mg/l)	Report		3500		Quarterly	Grab
Oil and Grease (mg/l)			10		Quarterly	Visual
Cr+3, PD (µg/l)	Report		Report	Report	Quarterly	Grab
Cu, PD (µg/l)						
Until 9/30/2014	9.3		Report	Report	Quarterly	Grab
Beginning 10/01/2014	Report		16	2.5	Quarterly	Grab
Fe, TR (µg/l)						
Until 9/30/2014	1,062		5,000	Report	Quarterly	Grab
Beginning 10/01/2014	Report		Report	150	Quarterly	Grab
Pb, PD (µg/l)	Report		Report	Report	Quarterly	Grab
Se, PD (µg/l)						
Until 12/31/2012	11.2		18.4	Report	Quarterly	Grab
Beginning 1/01/2013, through 9/30/2014	4.6		18.4	Report	Quarterly	Grab
Beginning 10/01/2014	4.6		18.4	0.92	Quarterly	Grab
Ag, PD (µg/l)	Report		Report	Report	Quarterly	Grab
Zn, PD (µg/l)						
Until 9/30/2014	89		Report	Report	Quarterly	Grab
Beginning 10/01/2014	Report		Report	28	Quarterly	Grab
B, Tot (mg/l)						
Until 9/30/2014	0.75			Report	Quarterly	Grab
Beginning 10/01/2014	Report			0.16	Quarterly	Grab
Chloride (mg/l)						
Until 9/30/2014	1500			Report	Quarterly	Grab
Beginning 10/01/2014	Report			55	Quarterly	Grab
Calcium (mg/l)	Report		Report		Quarterly	Grab
Magnesium (mg/l)	Report		Report		Quarterly	Grab
Sodium (mg/l)	Report		Report		Quarterly	Grab
Bicarbonate (mg/l)	Report		Report		Quarterly	Grab
SAR calc limit (capped at 6.8)*	Report				Quarterly	Calculate
SAR adjusted, effluent**	Report				Quarterly	Calculate
SARPass/Fail, beginning 10/01/2014***	Pass/Fail				Quarterly	Calculate
EC (dS/cm)						
Until 9/30/2014	Report		Report		Quarterly	Grab
Beginning 10/01/2014	1.8		Report		Quarterly	Grab
WET, chronic Until 9/30/2014						
Pimephales Lethality			Report Stat Diff & IC25		Annual	3 Grabs/Test****
Ceriodaphnia Lethality					Annual	3 Grabs/Test****
Pimephales Toxicity			Report Stat Diff & IC25		Annual	3 Grabs/Test****
Ceriodaphnia Toxicity					Annual	3 Grabs/Test****
WET, chronic Beginning 10/01/2014						
Pimephales Lethality			Stat Diff & IC25 ≥ IWC		Annual	3 Grabs/Test****
Ceriodaphnia Lethality					Annual	3 Grabs/Test****
Pimephales Toxicity			Report Stat Diff & IC25		Annual	3 Grabs/Test****
Ceriodaphnia Toxicity					Annual	3 Grabs/Test****

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**New Outfalls to COARLA05a, Tributaries: 056G-058G, 061G-062G, 066G, 068G**

<u><b>Effluent Parameter</b></u>	<u><b>Effluent Limitations Maximum Concentrations</b></u>				<u><b>Monitoring Requirements</b></u>	
	<u><b>30-Day Average *</b></u>	<u><b>7-Day Average *</b></u>	<u><b>Daily Maximum *</b></u>	<u><b>2-Year Average *</b></u>	<u><b>Frequency *</b></u>	<u><b>Sample Type *</b></u>
Effluent Flow (MGD)	Report		Report		Quarterly	Instantaneous
pH			6.5-9		Quarterly	Grab
TSS	30	45			Quarterly	Grab
Oil and Grease			10		Quarterly	Visual
Cr+3, PD (µg/l)	Report		Report	Report	Quarterly	Grab
Cu, PD (µg/l)	9.3		16	2.5	Quarterly	Grab
Fe, TR (ug/l)				150	Quarterly	Grab
Pb, PD (µg/l)	Report		Report	Report	Quarterly	Grab
Se, PD (µg/l)						
Until 12/31/2012	11.2		18.4	0.92	Quarterly	Grab
Beginning 01/01/2013	4.6		18.4	0.92	Quarterly	Grab
Ag, PD (µg/l)	Report		Report	Report	Quarterly	Grab
Zn, PD (µg/l)			Report	28	Quarterly	Grab
Boron, T (mg/l)				0.16	Quarterly	Grab
Chloride (mg/l)				55	Quarterly	Grab
Calcium (mg/l)	Report		Report		Quarterly	Grab
Magnesium (mg/l)	Report		Report		Quarterly	Grab
Sodium (mg/l)	Report		Report		Quarterly	Grab
Bicarbonate (mg/l)	Report		Report		Quarterly	Grab
SAR calc limit (capped at 6.8)*	Report		Report		Quarterly	Calculate
SAR, adjusted, effluent**	Report				Quarterly	Calculate
SAR Pass/Fail ***	Pass/Fail				Quarterly	Calculate
EC (dS/cm)	1.8				Quarterly	Grab
WET, chronic						
Pimephales Lethality			Stat Diff & IC25 ≥ IWC		Quarterly	3 Grabs/Test****
Ceriodaphnia Lethality					Quarterly	3 Grabs/Test****
Pimephales Toxicity			Report Stat		Quarterly	3 Grabs/Test****
Ceriodaphnia Toxicity			Diff & IC25		Quarterly	3 Grabs/Test****

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**Outfalls to COARLA06:Golden Eagle (G): 001G-007G, 012G-022G-029G, 031G-039G, 042G;Apache Canyon (A): 014A,060A**

<u><b>Effluent Parameter</b></u>	<u><b>Effluent Limitations Maximum Concentrations</b></u>				<u><b>Monitoring Requirements</b></u>	
	<u><b>30-Day Average *</b></u>	<u><b>7-Day Average *</b></u>	<u><b>Daily Maximum *</b></u>	<u><b>2-Year Average *</b></u>	<u><b>Frequency *</b></u>	<u><b>Sample Type *</b></u>
Effluent Flow (MGD)	Report		Report		Quarterly	Instantaneous
pH (su)			6.5-9		Quarterly	Grab
TSS (mg/l)	30	45			Quarterly	Grab
TDS (mg/l)	Report		3500		Quarterly	Grab
Oil and Grease (mg/l)			10		Quarterly	Visual
Cr+3, PD (µg/l)	Report		Report	Report	Quarterly	Grab
Cu, TR (µg/l)	200				Quarterly	Grab
Cu, PD (µg/l)						
Until 9/30/2014	Report		Report	Report	Quarterly	Grab
Beginning 10/01/2014	Report			2.5	Quarterly	Grab
Fe, TR (µg/l)	Report			Report	Quarterly	Grab
Se, TR (µg/l)	20				Quarterly	Grab
Se, PD (µg/l)						
Until 9/30/2014	Report		Report	Report	Quarterly	Grab
Beginning 10/01/2014	4.6		18.4	0.92	Quarterly	Grab
Ag, PD (µg/l)	Report		Report	Report	Quarterly	Grab
Zn, TR (µg/l)	2000				Quarterly	Grab
Zn, PD (µg/l)						
Until 9/30/2014	Report		Report	Report	Quarterly	Grab
Beginning 10/01/2014	Report			28	Quarterly	Grab
B, Tot (mg/l)						
Until 9/30/2014	0.75			Report	Quarterly	Grab
Beginning 10/01/2014	Report			0.16	Quarterly	Grab
Chloride (mg/l)	Report			Report	Quarterly	Grab
Calcium (mg/l)	Report		Report		Quarterly	Grab
Magnesium (mg/l)	Report		Report		Quarterly	Grab
Sodium (mg/l)	Report		Report		Quarterly	Grab
Bicarbonate (mg/l)	Report		Report		Quarterly	Grab
SAR calc limit (capped at 6.8)*	Report		Report		Quarterly	Calculate
SAR, adjusted, effluent**	Report				Quarterly	Calculate
SAR Pass/Fail, beginning 10/01/2014	Pass/Fail				Quarterly	Calculate
EC (dS/cm)						
Until 9/30/2014	Report		Report		Quarterly	Grab
Beginning 10/01/2014	1.8		Report		Quarterly	Grab
WET, acute						
Pimephales Lethality			LC50 ≥ IWC		Annual	Grab
daphnia magna Lethality					Annual	Grab

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**New Outfalls to COARLA06: All Golden Eagle (G): 045G-046G, 048G-050G, 052G, 054G-055G, 059G, 061G-080G**

<u><b>Effluent Parameter</b></u>	<u><b>Effluent Limitations Maximum Concentrations</b></u>				<u><b>Monitoring Requirements</b></u>	
	<u><b>30-Day Average</b></u> *	<u><b>7-Day Average</b></u> *	<u><b>Daily Maximum</b></u> *	<u><b>2-Year Average</b></u> *	<u><b>Frequency *</b></u>	<u><b>Sample Type *</b></u>
Effluent Flow (MGD)	Report		Report		Quarterly	Instantaneous
pH			6.5-9		Quarterly	Grab
TDS (mg/l)	Report		3500		Quarterly	Grab
TSS	30	45			Quarterly	Grab
Oil and Grease (mg/l)			10		Quarterly	Visual
Cr+3, PD (µg/l)	Report			Report	Quarterly	Grab
Cu, TR	200				Quarterly	Grab
Cu, PD (µg/l)	Report			2.5	Quarterly	Grab
Fe, TR (ug/l)	Report			Report	Quarterly	Grab
Se, TR (µg/l)	20				Quarterly	Grab
Se, PD (µg/l)	4.6		18.4	0.92	Quarterly	Grab
Ag, PD (µg/l)	Report			Report	Quarterly	Grab
Zn, TR (µg/l)	2000				Quarterly	Grab
Zn, PD (µg/l)	Report			28	Quarterly	Grab
Boron, T (mg/l)	Report			0.16	Quarterly	Grab
Chloride (mg/l)	Report			Report	Quarterly	Grab
Calcium (mg/l)	Report		Report		Quarterly	Grab
Magnesium (mg/l)	Report		Report		Quarterly	Grab
Sodium (mg/l)	Report		Report		Quarterly	Grab
Bicarbonate (mg/l)	Report		Report		Quarterly	Grab
SAR calc limit (capped at 6.8)*	Report		Report		Quarterly	Calculate
SAR adjusted, effluent**	Report				Quarterly	Calculate
SAR Pass/Fail***	Pass/Fail				Quarterly	Calculate
EC (dS/cm)	1.8		Report		Quarterly	Grab
WET, acute						
Pimephales Lethality			LC50 ≥ IWC		Quarterly	Grab
daphnia magna Lethality					Quarterly	Grab

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**New Outfalls to COARLA05a (direct to Purgatoire): All Golden Eagle (G): 047G, 051G, 053G, 060G**

<u><b>Effluent Parameter</b></u>	<u><b>Effluent Limitations Maximum Concentrations</b></u>				<u><b>Monitoring Requirements</b></u>	
	<u><b>30-Day Average</b></u>	<u><b>7-Day Average</b></u>	<u><b>Daily Maximum</b></u>	<u><b>2-Year Average</b></u>	<u><b>Frequency</b></u>	<u><b>Sample Type</b></u>
Effluent Flow (MGD)	Report		Report		Quarterly	Instantaneous
Temp (MWAT) °C	30				Quarterly	Grab
pH (su)			6.5-9		Quarterly	Grab
TSS (mg/l)	30	45			Quarterly	Grab
TDS (mg/l)	Report		3500		Quarterly	Grab
Oil and Grease			10		Quarterly	Visual
Cr+3, PD (µg/l)	Report		Report	Report	Quarterly	Grab
Cu, PD (µg/l)	Report		Report	2.5	Quarterly	Grab
Fe, TR (ug/l)	Report			150	Quarterly	Grab
Pb, PD (µg/l)	Report		Report	0.7	Quarterly	Grab
Se, PD (µg/l)	6.7		26	0.92	Quarterly	Grab
Ag, PD (µg/l)	Report		Report	Report	Quarterly	Grab
Zn, PD (µg/l)	Report		Report	28	Quarterly	Grab
Boron, T (ug/l)				0.16	Quarterly	Grab
Chloride (mg/l)	Report			Report	Quarterly	Grab
Calcium (mg/l)	Report		Report		Quarterly	Grab
Magnesium (mg/l)	Report		Report		Quarterly	Grab
Sodium (mg/l)	Report		Report		Quarterly	Grab
Bicarbonate (mg/l)	Report		Report		Quarterly	Grab
SAR calc limit (capped at 6.8)*	Report		Report		Quarterly	Calculate
SAR adjusted, effluent**	Report				Quarterly	Calculate
SAR Pass/Fail***	Pass/Fail				Quarterly	Calculate
EC (dS/cm)	1.8		Report		Quarterly	Grab
WET, acute						
Pimephales Lethality			LC50 ≥ IWC		Quarterly	Grab
daphnia magna Lethality					Quarterly	Grab

\* This SAR limit is to be calculated using the actual measured EC value (30-day average) of the effluent and substituting this value in to the following equation to solve for SAR. The equation for determining the SAR limit is:  $SAR = (7.1 * EC) - 2.48$ . **This limitation is capped at 6.8.**

\*\*The SAR value of the effluent is to be reported as the adjusted SAR. See the definitions section in Part I.C.13 for information on calculating the adjusted SAR value.

\*\*\* The permittee shall compare the SAR value of the effluent (adjusted SAR) to this calculated SAR limitation and report as Pass/Fail whether the effluent SAR meets this value. If the SAR effluent value (adjusted SAR) is less than or equal to the calculated limit, then the permittee will report "Pass" and if it is greater than the calculated limit the permittee will report "Fail."

\*\*\*\*Due to the remote location of the discharges, the 3 grab samples for the chronic WET tests may be taken on the same day, as long as the proper techniques are used for sample preservation and storage.

**B. TERMS AND CONDITIONS****1. Facilities Operation and Maintenance**

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee as necessary to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems when installed by the permittee only when necessary to achieve compliance with the conditions of the permit. However, the permittee shall operate, at a minimum, one complete set of each main line unit treatment process whether or not this process is needed to achieve permit effluent compliance. Any sludge produced at the wastewater treatment facility shall be disposed of in accordance with State and Federal guidelines and regulations.

## 2. Compliance Schedule

All information and written reports required by the following compliance schedules should be directed to the Industrial Unit of the Permits Section for final review unless otherwise stated.

- a. Mercury, Total Recoverable Beryllium, Radium 226+228, Strontium 90 and Thorium 230+232 Study – A compliance schedule will be required for gathering of mercury data at low-level detection limits of 0.003 ug/l, and for total recoverable beryllium and the radionuclides listed above. The permittee shall select a representative sampling of outfalls in each canyon, to perform the low-level mercury monitoring. A minimum of 10% of the outfalls in each canyon must be selected, with a minimum of 1 outfall being tested per canyon. This is a one time sample requirement. The selected outfalls, monitoring date, and the results shall all be submitted to the Division.

Code	Event	Description	Due Date
43699	Facility Evaluation Plan	Submit a preliminary report stating what outfalls have been selected for the analyses, why these outfalls were selected, and the expected date of sampling.	07/31/10
50008	Study Results	Submit all results for the monitoring.	12/31/10

- b. EC and SAR –The permittee is to begin collecting and reporting data for EC, adjusted SAR, Sodium, Calcium Bicarbonate and Magnesium data to determine if the EC and SAR limitations can be met.. If the limitations cannot be met, the permittee is to submit to the Division the selected option for meeting the limitations.

Code	Event	Description	Due Date
CS010	Status/ Progress Report	Submit a progress report summarizing the data collected to date for these parameters, and a statement as to whether the limitation can be met.	01/31/11
CS011	Plan Report or Scope of Work	If the limitation cannot be met, submit a report that identifies strategies to meet these limitations, including the selected strategy	01/31/12
CS010	Status/ Progress Report	Submit a progress report summarizing the progress in implementing the strategies such that compliance with these limitations may be attained.	01/31/13
CS010	Status/ Progress Report	Submit a progress report summarizing the progress in implementing the strategies such that compliance with these limitations may be attained.	01/31/14
50008	Study Results	Submit study results that show compliance has been attained with the EC and SAR limitations	09/30/14

- c. Activities to Meet Total Recoverable Iron, Potentially Dissolved Copper, Potentially Dissolved Lead, Potentially Dissolved Selenium, Potentially Dissolved Zinc, Boron and Chloride Final Limits – In order to meet the iron, copper, lead, selenium, zinc, boron and chloride limitations, the following schedule will be included in the permit.

Code	Event	Description	Due Date
07099	Monitoring Report	Submit a report that identifies strategies to meet the final limitations, including the selected strategy.	10/31/10
25099	Compliance Plan	Submit a progress report summarizing the progress in implementing the strategies such that compliance with the final limitations may be attained.	10/31/11

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25099	Compliance Plan	Submit a progress report summarizing the progress in implementing the strategies such that compliance with the final limitations may be attained.	10/31/12
25099	Compliance Plan	Submit a progress report summarizing the progress in implementing the strategies such that compliance with the final limitations may be attained.	10/31/13
CS017	Achieve Final Compliance with Discharge Limits	Submit study results that show compliance has been attained with the final limitations.	09/30/14

d. Mixing Zone Analyses, Outfalls 047G, 051G, 053G, 060G – Conduct remaining threshold tests for exclusion from further analysis under Mixing Zone Regulations. The second threshold test is the Application of the Mixing Zone Exclusion Tables (p. 20, Colorado Mixing Zone Implementation Guidance, February 2002). Under this compliance action, the permittee will collect the necessary site-specific data, perform the required analysis, and provide a report to the Division. The report will indicate the findings of this threshold test and, if not excluded, provide the workplan for the next threshold test (i.e., determining of the size of the physical and regulatory mixing zones).

Code	Event	Description	Due Date
50008	Submit Study Results	Collect site-specific data, perform threshold tests based on Mixing Zone Exclusion Tables, and submit study results.	01/01/2012

No later than 14 calendar days following each date identified in the above schedule of compliance, the permittee shall submit either a report of progress or, in the case of specific actions being required by identified dates, a written notice of compliance or noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

3. **Acute WET Testing Outfalls: 001G-007G, 012G-021G, 022G-029G, 031G-039G, 042G, 045G-046G, 048G-050G, 052G, 054G-055G, 059G, 061G-080G, 047G, 051G, 053G, 060G, 014A, 060A**

a. Testing and Reporting Requirements

Tests shall be done at the frequency listed in Part I.A. Test results shall be reported along with the Discharge Monitoring Report (DMR) submitted for the reporting period during which the sample was taken. (i.e., WET testing results for the first calendar quarter ending March 31 shall be reported with the DMR due April 28.) The results shall be submitted on the Acute Toxicity Test report form, available from the Division. Copies of these reports are to be submitted to the Division along with the DMR.

The permittee shall conduct each acute WET test in general accordance with methods described in Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition, October 2002, EPA-821-R-02-012, or the most current edition. The permittee shall conduct an acute 48-hour WET test using *Daphnia Magna*, and an acute 96-hour WET test using fathead minnows. Acute tests will be replacement static tests of a single effluent grab sample.

b. Failure of Test and Division Notification

An acute WET test is failed whenever the LC50, which represents an estimate of the effluent concentration which is lethal to 50% of the test organisms in the time period prescribed by the test, is found to be less than 100% effluent. The permittee must provide written notification of the failure of a WET test to the Division, along with a statement as to whether the Preliminary Toxicity Incident ("PTI")/Toxicity Identification Evaluation ("TIE") investigation or accelerated testing is being performed (see next section). Notification must be received by the Division within 14 calendar days of the demonstration of acute WET in the routine required test. "Demonstration" for the purposes of Parts I.B.3(b),(c),(d) and (f) means no later than the last day of the laboratory test.

c. Automatic Compliance Schedule Upon Failure of Test

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If a routine acute WET test is failed, the following automatic compliance schedule shall apply. As part of this the permittee shall either:

- (i) proceed to conduct the PTI/TIE investigation as described in Part I.B.4.(d), or
- (ii) conduct accelerated testing using the single species found to be more sensitive.

If accelerated testing is being performed, the permittee shall provide written notification of the results within 14 calendar days of completion of the "Pattern of Toxicity"/"No Toxicity" demonstration. Testing will be at least once every two weeks for up to five tests until 1) two consecutive tests fail or three of five tests fail, in which case a pattern of toxicity has been demonstrated or, 2) two consecutive tests pass or three of five tests pass, in which case no pattern of toxicity has been found. If no pattern of toxicity is found the toxicity episode is considered to be ended and routine testing is to resume. If a pattern of toxicity is found, a PTI/TIE investigation is to be performed. If a pattern of toxicity is not demonstrated but a significant level of erratic toxicity is found, the Division may require an increased frequency of routine monitoring or some other modified approach.

**d. PTI/TIE**

The results of the PTI/TIE investigation are to be received by the Division within 120 days of the demonstration of acute WET in the routine test, as defined above, or if accelerated testing is performed, the date the pattern of toxicity is demonstrated. A status report is to be provided to the Division at the 30, 60 and 90 day points of the PTI/TIE investigation. The Division may extend the time frame for investigation where reasonable justification exists. A request for an extension must be made in writing and received prior to the 120 day deadline. Such request must include a justification and supporting data for such an extension.

The permittee may use the time for investigation to conduct a PTI or move directly into the TIE. A PTI consists of a brief search for possible sources of WET, which might reveal causes of such toxicity and appropriate corrective actions more simply and cost effectively than a formal TIE. If the PTI allows resolution of the WET incident, the TIE need not necessarily be conducted. If, however, WET is not identified or resolved during the PTI, the TIE must be conducted within the allowed 120 day time frame.

Any permittee that is required to conduct a PTI/TIE investigation shall do so in conformance with procedures identified in the following documents, or as subsequently updated: 1) Methods for Aquatic Toxicity Identification Evaluations, Phase I Toxicity Characterization Procedures, EPA/600/6-91/003 Feb. 91 and 2) Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures, EPA/600/3-88/035 Feb. 1989.

A third document in this series is Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures, EPA/600/3-88/036 Feb. 1989. As indicated by the title, this procedure is intended to confirm that the suspected toxicant is truly the toxicant. This investigation is optional.

Within 90 days of the determination of the toxicant or no later than 210 days after demonstration of toxicity, whichever is sooner, a control program is to be developed and received by the Division. The program shall set down a method and procedure for elimination of the toxicity to acceptable levels.

**e. Request For Relief**

The permittee may request relief from further investigation and testing where the toxicant has not been determined and the Division has determined suitable treatment does not appear possible. In requesting such relief, the permittee shall submit material sufficient to establish the following:

- (i) It has complied with terms and conditions of the permit compliance schedule for the PTI/TIE investigation and other appropriate conditions as may have been required by the Division;
- (ii) During the period of the toxicity incident it has been in compliance with all other permit conditions, including, in the case of a POTW, pretreatment requirements;

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- (iii) During the period of the toxicity incident it has properly maintained and operated all facilities and systems of treatment and control; and
- (iv) Despite the circumstances described in paragraphs (i) and (iii) above, the source and/or cause of toxicity could not be located or resolved.

If deemed appropriate by the Division, the permit or the compliance schedule may be modified to revise the ongoing monitoring and toxicity investigation requirements to avoid an unproductive expenditure of the permittee's resources, provided that the underlying obligation to eliminate any continuing exceedance of the toxicity limit shall remain.

f. Spontaneous Disappearance

If toxicity spontaneously disappears at any time after a test failure, the permittee shall notify the Division in writing within 14 days of a demonstration of disappearance of the toxicity. The Division may require the permittee to develop and submit additional information which may include, but is not limited to, the results of additional testing. If no pattern of toxicity is identified or recurring toxicity is not identified, the toxicity incident response is considered closed and normal WET testing shall resume.

g. Toxicity Reopener

This permit may be reopened and modified (following proper administrative procedures) to include new compliance dates, additional or modified numerical permit limitations, a new or different compliance schedule, a change in the whole effluent toxicity testing protocol, or any other conditions related to the control of toxicants if one or more of the following events occur:

- (i) Toxicity has been demonstrated in the effluent and the permit does not contain a toxicity limitation.
- (ii) The PTI/TIE results indicate that the toxicant (s) represent pollutant(s) that may be controlled with specific numerical limits, and the Division agrees that the numerical controls are the most appropriate course of action.
- (iii) The PTI/TIE reveals other unique conditions or characteristics which, in the opinion of the Division, justify the incorporation of unanticipated special conditions in the permit

**4. Chronic WET Testing: Outfalls 008G- 011G, 040G-041G, 043G, 056G-058G, 061G- 062G, 066G, 068G, 079H-080H, 087H, 001A, 004A-008A, 010A, 015A-019A, 022A, 023A, 030A, 032A-034A, 036A, 039A-040A, 044A, 046A, 047A (DPAC-048), 049A (DPAC-050), 050A (DPAC-051), 030G**

a. Testing and Reporting Requirements

Tests shall be done at the frequency listed in Part I.A.2. Test results shall be reported along with the Discharge Monitoring Report (DMR) submitted for the reporting period during which the sample was taken. (i.e., WET testing results for the first calendar quarter ending March 31 shall be reported with the DMR due April 28.) The results shall be submitted on the Chronic Toxicity Test report form, available from the Division. Copies of these reports are to be submitted to both the Division and EPA along with the DMR.

The permittee shall conduct each chronic WET test in general accordance with methods described in Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, EPA/600/4-89/001 or the most current edition, except as modified by the most current Division guidance document entitled Guidelines for Conducting Whole Effluent Toxicity Tests. The permittee shall conduct such tests using *Ceriodaphnia dubia* and fathead minnows.

b. Failure of Test and Division Notification

Prior to the effective date of the limitation, a chronic WET test is failed whenever 1) there is a statistically significant difference in lethality between the control and any effluent concentration less than or equal to the instream waste concentration (IWC) and, 2) the IC<sub>25</sub>, which represents an estimate of the effluent concentration at which 25% of the test organisms demonstrate inhibition as reflected by lethality, is at any effluent concentration less than or equal to the IWC. The IWC for all outfalls has been determined to be 100. The permittee must provide written notification of the failure of a WET test to the Division, along with a statement as to whether a Preliminary Toxicity Investigation (PTI)/Toxicity

Identification Evaluation (TIE) or accelerated testing is being performed (see Part I.B.3.). **Notification must be received by the Division within 21 calendar days of the demonstration of chronic WET in the routine required test.** Demonstration for the purposes of Parts I.B.3.b., c., d. and f. means no later than the last day of the laboratory test.

c. Failure of Test and Division Notification

Beginning on the effective date of the limitation, a chronic WET test is failed whenever there is a statistically significant difference in lethality between the control and any effluent concentration less than or equal to the instream waste concentration (IWC). The IWC for all outfalls has been determined to be 100. The permittee must provide written notification of the failure of a WET test to the Division, along with a statement as to whether a Preliminary Toxicity Investigation (PTI)/Toxicity Identification Evaluation (TIE) or accelerated testing is being performed. **Notification must be received by the Division within 21 calendar days of the demonstration of chronic WET in the routine required test.** Demonstration for the purposes of Parts I.B.3.b., c., d., e. and g. means no later than the last day of the laboratory test.

d. Automatic Compliance Schedule Upon Failure of Test

If a routine chronic WET test is failed, regardless of whether the limit is in effect, the following automatic compliance schedule shall apply. As part of this, the permittee shall either:

- i. Proceed to conduct the PTI/TIE investigation as described in Part I.B.3.d., or
- ii. Conduct accelerated testing using the single species found to be more sensitive.

**If accelerated testing is being performed, the permittee shall provide written notification of the results within 14 calendar days of completion of the Pattern of Toxicity/No Toxicity demonstration.** Testing will be at least once every two weeks for up to five tests until; 1) two consecutive tests fail or three of five tests fail, in which case a pattern of toxicity has been demonstrated or 2) two consecutive tests pass or three of five tests pass, in which case no pattern of toxicity has been found. If no pattern of toxicity is found the toxicity episode is considered to be ended and routine testing is to resume. If a pattern of toxicity is found, a PTI/TIE investigation is to be performed. If a pattern of toxicity is not demonstrated but a significant level of erratic toxicity is found, the Division may require an increased frequency of routine monitoring or some other modified approach.

e. PTI/TIE

**The results of the PTI/TIE investigation are to be received by the Division within 120 days of the demonstration of chronic WET in the routine test, as defined above, or if accelerated testing is performed, the date the pattern of toxicity is demonstrated. A status report is to be provided to the Division at the 30, 60, and 90 day points of the PTI/TIE investigation.** The Division may extend the time frame for investigation where reasonable justification exists. A request for an extension must be made in writing and received prior to the 120 day deadline. Such request must include a justification and supporting data for such an extension.

The permittee may use the time for investigation to conduct a PTI or move directly into the TIE. A PTI consists of a brief search for possible sources of WET, which might reveal causes of such toxicity and appropriate corrective actions more simply and cost effectively than a formal TIE. If the PTI allows resolution of the WET incident, the TIE need not necessarily be conducted. If, however, WET is not identified or resolved during the PTI, the TIE must be conducted within the allowed 120 day time frame.

Any permittee that is required to conduct a PTI/TIE investigation shall do so in conformance with the procedures identified in the following documents, or as subsequently updated: 1) Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I, EPA/600/6-91/005F May 92, 2) Methods for Aquatic Toxicity Identification Evaluations, Phase I Toxicity Characterization Procedures, EPA/600/6-91/003 Feb. 91 and 3) Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures, EPA/600/3-88/035 Feb. 1989.

A fourth document in this series is Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures, EPA/600/3-88/036 Feb. 1989. As indicated by the title, this procedure is intended to confirm that the suspected toxicant is truly the toxicant. This investigation is optional.

Within 90 days of the determination of the toxicant or no later than 210 days after demonstration of toxicity, whichever is sooner, a control program is to be developed and received by the Division. The program shall set down a method and procedure for elimination of the toxicity to acceptable levels.

**f. Request For Relief**

The permittee may request relief from further investigation and testing where the toxicant has not been determined and suitable treatment does not appear possible. In requesting such relief, the permittee shall submit material sufficient to establish the following:

- i. It has complied with terms and conditions of the permit compliance schedule for the PTI/TIE investigation and other appropriate conditions as may have been required by the WQCD;
- ii. During the period of the toxicity incident it has been in compliance with all other permit conditions, including, in the case of a POTW, pretreatment requirements;
- iii. During the period of the toxicity incident it has properly maintained and operated all facilities and systems of treatment and control; and
- iv. Despite the circumstances described in paragraphs (i) and (iii) above, the source and/or cause of toxicity could not be located or resolved.

If deemed appropriate by the Division, the permit or the compliance schedule may be modified to revise the ongoing monitoring and toxicity investigation requirements to avoid an unproductive expenditure of the permittee's resources, provided that the underlying obligation to eliminate any continuing exceedance of the toxicity limit shall remain.

**f. Spontaneous Disappearance**

If toxicity spontaneously disappears at any time after a test failure, the permittee shall notify the Division in writing within 14 days of a demonstration of disappearance of the toxicity. The Division may require the permittee to develop and submit additional information, which may include, but is not limited to, the results of additional testing. If no pattern of toxicity is identified or recurring toxicity is not identified, the toxicity incident response is considered closed and normal WET testing shall resume.

**g. Toxicity Reopener**

This permit may be reopened and modified (following proper administrative procedures) to include new compliance dates, additional or modified numerical permit limitations, a new or different compliance schedule, a change in the whole effluent toxicity testing protocol, or any other conditions related to the control of toxicants if one or more of the following events occur:

- i. Toxicity has been demonstrated in the effluent and the permit does not contain a toxicity limitation.
- ii. The PTI/TIE results indicate that the identified toxicant(s) represent pollutant(s) that may be controlled with specific numerical limits and the permit issuing authority agrees that the control of such toxicants through numerical limits is the most appropriate course of action.
- iii. The PTI/TIE reveals other unique conditions or characteristics, which, in the opinion of the permit issuing authority, justify the incorporation of unanticipated special conditions in the permit.

**C. DEFINITIONS OF TERMS**

1. Antidegradation limits apply as the average of all data collected for months in that group during a rolling 24-month period. These limits become effective after data has been collected for all months in the group during the 24 months following permit issuance. Where antidegradation groups are not indicated, data from all months will be utilized to determine the reported value and the limit will become effective in the 24th month in which the permit is effective.
2. "Chronic lethality" occurs when a statistically significant difference, at the 95% confidence level, occurs in the chronic test between the mortality of the test species in **100%** effluent (the chronic IWC = 100%) and the control.
3. "Composite" sample is a minimum of four (4) grab samples collected at equally spaced two (2) hour intervals and proportioned according to flow.

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4. "Continuous" measurement, is a measurement obtained from an automatic recording device which continually measures provides measurements.
5. "Daily Maximum limitation" for all parameters except temperature, means the limitation for this parameter shall be applied as an instantaneous maximum (or, for pH or DO, instantaneous minimum) value. The instantaneous value is defined as the analytical result of any individual sample. DMRs shall include the maximum (and/or minimum) of all instantaneous values within the calendar month. Any instantaneous value beyond the noted daily maximum limitation for the indicated parameter shall be considered a violation of this permit.
6. "Daily Maximum Temperature (DM)" is defined in the Basic Standards and Methodologies for Surface Water 1002-31, as the highest two-hour average water temperature recorded during a given 24-hour period.
7. "Dissolved (D) metals fraction" is defined in the Basic Standards and Methodologies for Surface Water 1002-31, as that portion of a water and suspended sediment sample which passed through a 0.40 or 0.45 UM (micron) membrane filter. Determinations of "dissolved" constituents are made using the filtrate. This may include some very small (colloidal) suspended particles which passed through the membrane filter as well as the amount of substance present in true chemical solution.
8. "Grab" sample, is a single "dip and take" sample so as to be representative of the parameter being monitored.
9. "In-situ" measurement is defined as a single reading, observation or measurement taken in the field at the point of discharge.
10. "Instantaneous" measurement is a single reading, observation, or measurement performed on site using existing monitoring facilities.
11. "Maximum Weekly Average Temperature (MWAT)" is defined in the Basic Standards and Methodologies for Surface Water 1002-31, as an implementation statistic that is calculated from field monitoring data. The MWAT is calculated as the largest mathematical mean of multiple, equally spaced, daily temperatures over a seven-day consecutive period, with a minimum of three data points spaced equally through the day. For lakes and reservoirs, the MWAT is assumed to be equivalent to the maximum WAT from at least three profiles distributed throughout the growing season (generally July-September).
12. "Potentially dissolved (PD) metals fraction" is defined in the Basic Standards and Methodologies for Surface Water 1002-31, as that portion of a constituent measured from the filtrate of a water and suspended sediment sample that was first treated with nitric acid to a pH of 2 or less and let stand for 8 to 96 hours prior to sample filtration using a 0.40 or 0.45-UM (micron) membrane filter. Note the "potentially dissolved" method cannot be used where nitric acid will interfere with the analytical procedure used for the constituent measured.
13. SAR and Adjusted SAR - The equation for calculation of SAR-adj is:

$$SAR-adj = \frac{Na^+}{\sqrt{\frac{Ca_x + Mg^{++}}{2}}}$$

Where:

$Na^+$  = Sodium in the effluent reported in meq/l

$Mg^{++}$  = Magnesium in the effluent reported in meq/l

$Ca_x$  = calcium (in meq/l) in the effluent modified due to the ratio of bicarbonate to calcium

The values for sodium ( $Na^+$ ), calcium ( $Ca^{++}$ ), bicarbonate ( $HCO_3^-$ ) and magnesium ( $Mg^{++}$ ) in this equation are expressed in units of milliequivalents per liter (meq/l). Generally, data for these parameters are reported in terms of mg/l, which must then be converted to calculate the SAR. The conversions are:

$$meq/l = \frac{\text{Concentration in mg/l}}{\text{Equivalent weight in mg/meq}}$$

Where the equivalent weights are determined based on the atomic weight of the element divided by the ion's charge:

$Na^+ = 23.0 \text{ mg/meq}$  (atomic weight of 23, charge of 1)

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$\text{Ca}^{++} = 20.0 \text{ mg/meq}$  (atomic weight of 40.078, charge of 2)

$\text{Mg}^{++} = 12.15 \text{ mg/meq}$  (atomic weight of 24.3, charge of 2)

$\text{HCO}_3^- = 61 \text{ mg/mep}$  (atomic weight of 61, charge of 1)

The *EC* and the  $\text{HCO}_3^-/\text{Ca}^{++}$  ratio in the effluent (calculated by dividing the  $\text{HCO}_3^-$  in meq/l by the  $\text{Ca}^{++}$  in meq/l) are used to determine the  $\text{Ca}_x$  using the following table.

**Table – Modified Calcium Determination for Adjusted Sodium Adsorption Ratio**

<b><math>\text{HCO}_3^-/\text{Ca}</math> Ratio And <math>EC^{1, 2, 3}</math></b>													
<b>Salinity of Effluent (<i>EC</i>)(dS/m)</b>													
		<b>0.1</b>	<b>0.2</b>	<b>0.3</b>	<b>0.5</b>	<b>0.7</b>	<b>1.0</b>	<b>1.5</b>	<b>2.0</b>	<b>3.0</b>	<b>4.0</b>	<b>6.0</b>	<b>8.0</b>
<b>Ratio of <math>\text{HCO}_3^-/\text{Ca}</math></b>	<b>.05</b>	13.20	13.61	13.92	14.40	14.79	15.26	15.91	16.43	17.28	17.97	19.07	19.94
	<b>.10</b>	8.31	8.57	8.77	9.07	9.31	9.62	10.02	10.35	10.89	11.32	12.01	12.56
	<b>.15</b>	6.34	6.54	6.69	6.92	7.11	7.34	7.65	7.90	8.31	8.64	9.17	9.58
	<b>.20</b>	5.24	5.40	5.52	5.71	5.87	6.06	6.31	6.52	6.86	7.13	7.57	7.91
	<b>.25</b>	4.51	4.65	4.76	4.92	5.06	5.22	5.44	5.62	5.91	6.15	6.52	6.82
	<b>.30</b>	4.00	4.12	4.21	4.36	4.48	4.62	4.82	4.98	5.24	5.44	5.77	6.04
	<b>.35</b>	3.61	3.72	3.80	3.94	4.04	4.17	4.35	4.49	4.72	4.91	5.21	5.45
	<b>.40</b>	3.30	3.40	3.48	3.60	3.70	3.82	3.98	4.11	4.32	4.49	4.77	4.98
	<b>.45</b>	3.05	3.14	3.22	3.33	3.42	3.53	3.68	3.80	4.00	4.15	4.41	4.61
	<b>.50</b>	2.84	2.93	3.00	3.10	3.19	3.29	3.43	3.54	3.72	3.87	4.11	4.30
	<b>.75</b>	2.17	2.24	2.29	2.37	2.43	2.51	2.62	2.70	2.84	2.95	3.14	3.28
	<b>1.00</b>	1.79	1.85	1.89	1.96	2.01	2.09	2.16	2.23	2.35	2.44	2.59	2.71
	<b>1.25</b>	1.54	1.59	1.63	1.68	1.73	1.78	1.86	1.92	2.02	2.10	2.23	2.33
	<b>1.50</b>	1.37	1.41	1.44	1.49	1.53	1.58	1.65	1.70	1.79	1.86	1.97	2.07
	<b>1.75</b>	1.23	1.27	1.30	1.35	1.38	1.43	1.49	1.54	1.62	1.68	1.78	1.86
	<b>2.00</b>	1.13	1.16	1.19	1.23	1.26	1.31	1.36	1.40	1.48	1.54	1.63	1.70
	<b>2.25</b>	1.04	1.08	1.10	1.14	1.17	1.21	1.26	1.30	1.37	1.42	1.51	1.58
	<b>2.50</b>	0.97	1.00	1.02	1.06	1.09	1.12	1.17	1.21	1.27	1.32	1.40	1.47
	<b>3.00</b>	0.85	0.89	0.91	0.94	0.96	1.00	1.04	1.07	1.13	1.17	1.24	1.30
	<b>3.50</b>	0.78	0.80	0.82	0.85	0.87	0.90	0.94	0.97	1.02	1.06	1.12	1.17
	<b>4.00</b>	0.71	0.73	0.75	0.78	0.80	0.82	0.86	0.88	0.93	0.97	1.03	1.07
	<b>4.50</b>	0.66	0.68	0.69	0.72	0.74	0.76	0.79	0.82	0.86	0.90	0.95	0.99
	<b>5.00</b>	0.61	0.63	0.65	0.67	0.69	0.71	0.74	0.76	0.80	0.83	0.88	0.93
	<b>7.00</b>	0.49	0.50	0.52	0.53	0.55	0.57	0.59	0.61	0.64	0.67	0.71	0.74
	<b>10.00</b>	0.39	0.40	0.41	0.42	0.43	0.45	0.47	0.48	0.51	0.53	0.56	0.58
	<b>20.00</b>	0.24	0.25	0.26	0.26	0.27	0.28	0.29	0.30	0.32	0.33	0.35	0.37
	<b>30.00</b>	0.18	0.19	0.20	0.20	0.21	0.21	0.22	0.23	0.24	0.25	0.27	0.28

<sup>1</sup> Adapted from Suarez (1981).

<sup>2</sup> Assumes a soil source of calcium from lime ( $\text{CaCO}_3$ ) or silicates; no precipitation of magnesium, and partial pressure of  $\text{CO}_2$  near the soil surface ( $P_{\text{CO}_2}$ ) is 0.0007 atmospheres.

<sup>3</sup>  $\text{Ca}_x$ ,  $\text{HCO}_3^-$ ,  $\text{Ca}$  are reported in meq/l; *EC* is in dS/m (deciSiemens per meter).

Because values will not always be quantified at the exact *EC* or  $\text{HCO}_3^-/\text{Ca}^{++}$  ratio in the table, the resulting  $\text{Ca}_x$  must be determined based on the closest value to the calculated value. For example, for a calculated *EC* of 2.45 dS/m, the column for the *EC* of 2.0 would be used. However, for a calculated *EC* of 5.1, the corresponding column for the *EC* of 6.0 would be used. Similarly, for a  $\text{HCO}_3^-/\text{Ca}^{++}$  ratio of 25.1, the row for the 30 ratio would be used.

The Division acknowledges that some effluents may have electrical conductivity levels that fall outside of this table, and others have bicarbonate to calcium ratios that fall outside this table. For example, some data reflect  $\text{HCO}_3^-/\text{Ca}^{++}$  ratios greater than 30 due to bicarbonate concentrations reported greater than 1000 mg/l versus calcium concentrations generally less than 10 mg/l (i.e., corresponding to  $\text{HCO}_3^-/\text{Ca}^{++}$  ratios greater than 100). Despite these high values exceeding the chart's boundaries, it is noted that the higher the  $\text{HCO}_3^-/\text{Ca}^{++}$  ratio, the greater the SAR-adj. Thus, using the  $\text{Ca}_x$  values corresponding to the final

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row containing bicarbonate/calcium ratios of 30, the permittee will actually calculate an SAR-adj that is less than the value calculated if additional rows reflecting  $\text{HCO}_3^-/\text{Ca}^{++}$  ratios of greater than 100 were added.

14. "Quarterly measurement frequency" means samples may be collected at any time during the calendar quarter if a continual discharge occurs. If the discharge is intermittent, then samples shall be collected during the period that discharge occurs.
15. "Recorder" requires the continuous operation of a chart and/or totalizer (or drinking water rotor meters or pump hour meters where previously approved.)
16. "Seven (7) day average" means, with the exception of fecal coliform or *E. coli* bacteria (see geometric mean), the arithmetic mean of all samples collected in a seven (7) consecutive day period. When calculating the 7-day average, a value of zero should be used in place of any value that is less than the reporting limit. If all values are less than the reporting limit, "<x" should be reported, where "x" is the reporting limit. Otherwise, the calculated average shall be reported. Such seven (7) day averages shall be calculated for all calendar weeks, which are defined as beginning on Sunday and ending on Saturday. If the calendar week overlaps two months (i.e. the Sunday is in one month and the Saturday in the following month), the seven (7) day average calculated for that calendar week shall be associated with the month that contains the Saturday. Samples may not be used for more than one (1) reporting period.
17. "Thirty (30) day average" means, except for fecal coliform or *E. coli* bacteria (see geometric mean), the arithmetic mean of all samples collected during a thirty (30) consecutive-day period. When calculating the 30-day average, a value of zero should be used in place of any value that is less than the reporting limit. If all values are less than the reporting limit, "<x" should be reported, where "x" is the reporting limit. Otherwise, the calculated average shall be reported. The permittee shall report the appropriate mean of all self-monitoring sample data collected during the calendar month on the Discharge Monitoring Reports. Samples shall not be used for more than one (1) reporting period.
18. "Total Metals" means the concentration of metals determined on an unfiltered sample following vigorous digestion (Section 4.1.3), or the sum of the concentrations of metals in both the dissolved and suspended fractions, as described in Manual of Methods for Chemical Analysis of Water and Wastes, U.S. Environmental Protection Agency, March 1979, or its equivalent.
19. "Total Recoverable Metals" means that portion of a water and suspended sediment sample measured by the total recoverable analytical procedure described in Methods for Chemical Analysis of Water and Wastes, U.S. Environmental Protection Agency, March 1979 or its equivalent.
20. "Twenty four (24) hour composite" sample is a combination of at least eight (8) sample aliquots of at least 100 milliliters, collected at equally spaced intervals during the operating hours of a facility over a twenty-four (24) hour period. For volatile pollutants, aliquots must be combined in the laboratory immediately before analysis. The composite must be flow proportional; either the time interval between each aliquot or the volume of each aliquot must be proportional to either the wastewater or effluent flow at the time of sampling or the total wastewater or effluent flow since the collection of the previous aliquot. Aliquots may be collected manually or automatically.
21. "Twice Monthly" monitoring frequency means that two samples shall be collected each calendar month on separate weeks with at least one full week between the two sample dates. Also, there shall be at least one full week between the second sample of a month and the first sample of the following month.
22. "Visual" observation is observing the discharge to check for the presence of a visible sheen or floating oil.
23. "Water Quality Control Division" or "Division" means the state Water Quality Control Division as established in 25-8-101 et al.)

Additional relevant definitions are found in the Colorado Water Quality Control Act, CRS §§ 25-8-101 et seq., the Colorado Discharge Permit System Regulations, Regulation 61 (5 CCR 1002-61) and other applicable regulations.

**D. GENERAL MONITORING, SAMPLING AND REPORTING REQUIREMENTS**

**1. Routine Reporting of Data**

Reporting of the data gathered in compliance with Part I.A shall be on a **quarterly** basis. Reporting of all data gathered shall comply with the requirements of Part I.D. (General Requirements). Monitoring results shall be summarized for each calendar

month and reported on Division approved discharge monitoring report (DMR) forms (EPA form 3320-1). One form shall be mailed to the Water Quality Control Division, as indicated below, so that the DMR is received no later than the 28th day of the following month (for example, the DMR for the first calendar quarter must be received by the Division by April 28th). If no discharge occurs during the reporting period, "No Discharge" shall be reported.

The original signed copy of each discharge monitoring report (DMR) shall be submitted to the Division at the following address:

Colorado Department of Public Health and Environment  
Water Quality Control Division  
WQCD-P-B2  
4300 Cherry Creek Drive South  
Denver, Colorado 80246-1530

The Discharge Monitoring Report forms shall be filled out accurately and completely in accordance with requirements of this permit and the instructions on the forms. They shall be signed by an authorized person as identified in Part I.ED.5.

## **2. Representative Sampling**

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in this permit and, unless otherwise specified, before the effluent joins or is diluted by any other wastestream, body of water, or substance. Monitoring points shall not be changed without notification to and approval by the Division.

## **3. Analytical and Sampling Methods for Monitoring**

The permittee shall install, calibrate, use and maintain monitoring methods and equipment, including biological and indicated pollutant monitoring methods. All sampling shall be performed by the permittee according to specified methods in 40 C.F.R. Part 136; methods approved by EPA pursuant to 40 C.F.R. Part 136; or methods approved by the Division, in the absence of a method specified in or approved pursuant to 40 C.F.R. Part 136.

**The analytical method and PQL selected for a parameter shall be the one that can measure compliance with the permit limitation. If all analytical methods and corresponding PQLs are greater than the permit limit, then the analytical method with the lowest PQL shall be used. If the permit contains a monitoring or report only requirement, the analytical method with the lowest PQL shall be used.**

**When the analytical method which complies with the above requirements has a PQL greater than the permit limit, the permittee shall report "BDL" on the DMR. Such reports will not be considered as violations of the permit limit, as long as the lowest available PQL is used for the analysis. When the analytical method which complies with the above requirements has a PQL that is equal to or less than the permit limitation, "< X" (where X = the actual PQL achieved by the laboratory) shall be reported on the DMR. For parameters that have only a monitoring or report only limitation, "< X" (where X = the actual PQL achieved by the laboratory) shall be reported on the DMR.**

The present lowest PQLs for specific parameters, as determined by the State Laboratory (November 2008) are provided below. If the analytical method cannot achieve a PQL that is less than or equal to the permit limit, then the method, or a more precise method, must achieve a PQL that is less than or equal to the PQL in the table below. A listing of the PQLs for organic parameters that must meet the above requirement can be found in the Division's Practical Quantitation Limitation Guidance Document, July 2008.

These limits apply to the total recoverable or the potentially dissolved fraction of metals.

For hexavalent chromium, samples must be unacidified so dissolved concentrations will be measured rather than potentially dissolved concentrations. The procedure for determining settleable solids is contained in 40 CFR 434.64. The practical quantitation limit for measuring settleable solids under this part shall be 0.4 ml/l.

In the calculation of average concentrations, those analytical results that are less than the practical quantitation limit shall be considered to be zero for calculation purposes. If all individual analytical results that would be used in the calculations are below the practical quantitation limit, then "less than x ", where x is the practical quantitation limit, shall be reported on the DMR. Otherwise, report the calculated value.

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Parameter	Practical Quantitation Limits,	Parameter	Practical Quantitation Limits, µg/l
Aluminum	50 µg/l	Manganese	2 µg/l
Ammonia	1 mg/l	Mercury	0.1 µg/l
Arsenic	1 µg/l	Mercury (low-level)	0.003 µg/l
Barium	5 µg/l	Nickel	50 µg/l
Beryllium	1 µg/l	N-Ammonia	50 µg/l
BOD / CBOD	1 mg/l	N Nitrate/Nitrite	0.5 mg/l
Boron	50 µg/l	N-Nitrate	50 µg/l
Cadmium	1 µg/l	N-Nitrite	10 µg/l
Calcium	20 µg/l	Total Nitrogen	0.5 mg/l
Chloride	2 mg/l	Phenols	100 µg/l
Chlorine	0.1 mg/l	Phosphorus	10 µg/l
Total Residual Chlorine		Radium 226	1 pCi/l
DPD colorimetric	0.10 mg/l	Radium 228	1 pCi/l
Amperometric titration	0.05 mg/l	Selenium	1 µg/l
Chromium	20 µg/l	Silver	0.5 µg/l
Chromium, Hexavalent	20 µg/l	Sodium	0.2 mg/l
Copper	5 µg/l	Sulfate	5 mg/l
Cyanide (Direct / Distilled)	10 µg/l	Sulfide	0.2 mg/l
Cyanide, WAD+A47	5 µg/l	Total Dissolved Solids	10 mg/l
Fluoride	0.1 mg/l	Total Suspended Solids	10 mg/l
Iron	10 µg/l	Thallium	1 µg/l
Lead	1 µg/l	Uranium	1 µg/l
Magnesium	20 µg/l	Zinc	10 µg/l

**4. Records**

The permittee shall establish and maintain records. Those records shall include the following:

- The date, type, exact location, and time of sampling or measurements;
- The individual(s) who performed the sampling or measurements;
- The date(s) the analyses were performed;
- The individual(s) who performed the analyses;
- The analytical techniques or methods used;
- The results of such analyses; and
- Any other observations which may result in an impact on the quality or quantity of the discharge as indicated in 40 CFR 122.44 (i)(1)(iii).

The permittee shall retain for a minimum of three (3) years records of all monitoring information, including all original strip chart recordings for continuous monitoring instrumentation, all calibration and maintenance records, copies of all reports required by this permit and records of all data used to complete the application for this permit. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the permittee or when requested by the Division or EPA.

**5. Signatory and Certification Requirements**

- All reports and other information required by the Division, shall be signed and certified for accuracy by the permittee in accord with the following criteria:
  - In the case of corporations, by a responsible corporate officer. For purposes of this section, the responsible corporate officer is responsible for the overall operation of the facility from which the discharge described in the form originates;
  - In the case of a partnership, by a general partner;
  - In the case of a sole proprietorship, by the proprietor;

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- iv) In the case of a municipal, state, or other public facility, by either a principal executive officer, or ranking elected official. For purposes of this section, a principal executive officer has responsibility for the overall operation of the facility from which the discharge originates;
- v) By a duly authorized representative of a person described above, only if:
  - 1) The authorization is made in writing by a person described in i, ii, iii, or iv above;
  - 2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and,
  - 3) The written authorization is submitted to the Division.
- b. If an authorization as described in this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of this section must be submitted to the Division prior to or together with any reports, information, or applications to be signed by an authorized representative.

The permittee, or the duly authorized representative shall make and sign the following certification on all such documents:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

**PART II**

**A. NOTIFICATION REQUIREMENTS**

**1. Notification to Parties**

All notification requirements under this section shall be directed as follows:

- a. Oral Notifications, during normal business hours shall be to:

Water Quality Protection Section - Industrial Compliance Program  
Water Quality Control Division  
Telephone: (303) 692-3500

- b. Written notification shall be to:

Water Quality Protection Section - Industrial Compliance Program  
Water Quality Control Division  
Colorado Department of Public Health and Environment  
WQCD-WQP-B2  
4300 Cherry Creek Drive South  
Denver, CO 80246-1530

**2. Change in Discharge**

The permittee shall notify the Division, in writing, of any planned physical alterations or additions to the permitted facility. Notice is required only when:

- a. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged, or;
- b. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported pursuant to an approved land application plan.

The permittee shall give advance notice to the Division of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

Whenever notification of any planned physical alterations or additions to the permitted facility is required pursuant to this section, the permittee shall furnish the Division such plans and specifications which the Division deems reasonably necessary to evaluate the effect on the discharge, the stream, or ground water. If the Division finds that such new or altered discharge might be inconsistent with the conditions of the permit, the Division shall require a new or revised permit application and shall follow the procedures specified in Sections 61.5 through 61.6, and 61.15 of the Colorado Discharge Permit System Regulations.

**3. Special Notifications - Definitions**

- a. Bypass: The intentional diversion of waste streams from any portion of a treatment facility.
- b. Severe Property Damage: Substantial physical damage to property at the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. It does not mean economic loss caused by delays in production.
- c. Upset: An exceptional incident in which there is unintentional and temporary noncompliance with permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.

#### 4. Noncompliance Notification

- a. If, for any reason, the permittee does not comply with or will be unable to comply with any discharge limitations or standards specified in this permit, the permittee shall, at a minimum, provide the Division and EPA with the following information:
  - i) A description of the discharge and cause of noncompliance;
  - ii) The period of noncompliance, including exact dates and times and/or the anticipated time when the discharge will return to compliance; and
  - iii) Steps being taken to reduce, eliminate, and prevent recurrence of the noncomplying discharge.
- b. The permittee shall report the following circumstances **orally within twenty-four (24) hours** from the time the permittee becomes aware of the circumstances, and shall mail to the Division a written report containing the information requested in Part II.A.4 (a) **within five (5) days** after becoming aware of the following circumstances:
  - i) Circumstances leading to any noncompliance which may endanger health or the environment regardless of the cause of the incident;
  - ii) Circumstances leading to any unanticipated bypass which exceeds any effluent limitations in the permit;
  - iii) Circumstances leading to any upset which causes an exceedance of any effluent limitation in the permit;
  - iv) Daily maximum violations for any of the pollutants limited by Part I.A of this permit and specified as requiring 24-hour notification. This includes any toxic pollutant or hazardous substance or any pollutant specifically identified as the method to control any toxic pollutant or hazardous substance.
- c. The permittee shall report instances of non-compliance which are not required to be reported within 24-hours at the time Discharge Monitoring Reports are submitted. The reports shall contain the information listed in sub-paragraph (a) of this section.

#### 5. Other Notification Requirements

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule in the permit shall be submitted no later than fourteen (14) days following each scheduled date, unless otherwise provided by the Division.

The permittee shall notify the Division, in writing, thirty (30) days in advance of a proposed transfer of permit as provided in Part II.B.3.

The permittee's notification of all anticipated noncompliance does not stay any permit condition.

All existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Division as soon as they know or have reason to believe:

- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
  - i) One hundred micrograms per liter (100 µg/l);
  - ii) Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and one milligram per liter (1.0 mg/l) for antimony;
  - iii) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with Section 61.4(2)(g).
  - iv) The level established by the Division in accordance with 40 C.F.R. § 122.44(f).

- b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
  - i) Five hundred micrograms per liter (500 µg/l);
  - ii) One milligram per liter (1 mg/l) for antimony; and
  - iii) Ten (10) times the maximum concentration value reported for that pollutant in the permit application.
  - iv) The level established by the Division in accordance with 40 C.F.R. § 122.44(f).

## **6. Bypass Notification**

If the permittee knows in advance of the need for a bypass, a notice shall be submitted, at least ten days before the date of the bypass, to the Division. The bypass shall be subject to Division approval and limitations imposed by the Division. Violations of requirements imposed by the Division will constitute a violation of this permit.

## **7. Upsets**

### **a. Effect of an Upset**

An upset constitutes an affirmative defense to an action brought for noncompliance with permit effluent limitations if the requirements of paragraph (b) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

### **b. Conditions Necessary for a Demonstration of Upset**

A permittee who wishes to establish the affirmative defense of upset shall demonstrate through properly signed contemporaneous operating logs, or other relevant evidence that:

- i) An upset occurred and that the permittee can identify the specific cause(s) of the upset; and
- ii) The permitted facility was at the time being properly operated and maintained; and
- iii) The permittee submitted proper notice of the upset as required in Part II.A.4. of this permit (24-hour notice); and
- iv) The permittee complied with any remedial measure necessary to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

In addition to the demonstration required above, a permittee who wishes to establish the affirmative defense of upset for a violation of effluent limitations based upon water quality standards shall also demonstrate through monitoring, modeling or other methods that the relevant standards were achieved in the receiving water.

### **c. Burden of Proof**

In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

## **8. Discharge Point**

Any discharge to the waters of the State from a point source other than specifically authorized by this permit is prohibited.

## **9. Proper Operation and Maintenance**

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee as necessary to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance and adequate laboratory and process controls, including appropriate quality assurance procedures (40 CFR 122.41(e)). This provision requires the operation of back-up or

auxiliary facilities or similar systems which are installed by the permittee only when necessary to achieve compliance with the conditions of the permit.

**10. Minimization of Adverse Impact**

The permittee shall take all reasonable steps to minimize or prevent any discharge of sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. As necessary, accelerated or additional monitoring to determine the nature and impact of the noncomplying discharge is required.

**11. Removed Substances**

Solids, sludges, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed in accordance with applicable state and federal regulations.

For all domestic wastewater treatment works, at industrial facilities, the permittee shall dispose of sludge in accordance with all State and Federal regulations.

**12. Submission of Incorrect or Incomplete Information**

Where the permittee failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or report to the Division, the permittee shall promptly submit the relevant information which was not submitted or any additional information needed to correct any erroneous information previously submitted.

**13. Bypass**

- a. Bypasses are prohibited and the Division may take enforcement action against the permittee for bypass, unless:
  - i) The bypass is unavoidable to prevent loss of life, personal injury, or severe property damage;
  - ii) There were no feasible alternatives to bypass such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
  - iii) Proper notices were submitted in compliance with Part II.A.4.
- b. "Severe property damage" as used in this Subsection means substantial physical damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- c. The permittee may allow a bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance or to assure optimal operation. These bypasses are not subject to the provisions of paragraph (a) above.
- d. The Division may approve an anticipated bypass, after considering adverse effects, if the Division determines that the bypass will meet the conditions specified in paragraph (a) above.

**14. Reduction, Loss, or Failure of Treatment Facility**

The permittee has the duty to halt or reduce any activity if necessary to maintain compliance with the effluent limitations of the permit. Upon reduction, loss, or failure of the treatment facility, the permittee shall, to the extent necessary to maintain compliance with its permit, control production, control sources of wastewater, or all discharges, until the facility is restored or an alternative method of treatment is provided. This provision also applies to power failures, unless an alternative power source sufficient to operate the wastewater control facilities is provided.

It shall not be a defense for a permittee in an enforcement action that it would be necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

**B. RESPONSIBILITIES**

**1. Inspections and Right to Entry**

The permittee shall allow the Division and/or the authorized representative, upon the presentation of credentials:

- a. To enter upon the permittee's premises where a regulated facility or activity is located or in which any records are required to be kept under the terms and conditions of this permit;
- b. At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit and to inspect any monitoring equipment or monitoring method required in the permit; and
- c. To enter upon the permittee's premises in a reasonable manner and at a reasonable time to inspect and/or investigate, any actual, suspected, or potential source of water pollution, or to ascertain compliance or non compliance with the Colorado Water Quality Control Act or any other applicable state or federal statute or regulation or any order promulgated by the Division. The investigation may include, but is not limited to, the following: sampling of any discharge and/or process waters, the taking of photographs, interviewing of any person having knowledge related to the discharge permit or alleged violation, access to any and all facilities or areas within the permittee's premises that may have any effect on the discharge, permit, or alleged violation. Such entry is also authorized for the purpose of inspecting and copying records required to be kept concerning any effluent source.
- d. The permittee shall provide access to the Division to sample the discharge at a point after the final treatment process but prior to the discharge mixing with state waters upon presentation of proper credentials.

In the making of such inspections, investigations, and determinations, the Division, insofar as practicable, may designate as its authorized representatives any qualified personnel of the Department of Agriculture. The Division may also request assistance from any other state or local agency or institution.

**2. Duty to Provide Information**

The permittee shall furnish to the Division, within a reasonable time, any information which the Division may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Division, upon request, copies of records required to be kept by this permit.

**3. Transfer of Ownership or Control**

- a. Except as provided in paragraph b. of this section, a permit may be transferred by a permittee only if the permit has been modified or revoked and reissued as provided in Section 61.8(8) of the Colorado Discharge Permit System Regulations, to identify the new permittee and to incorporate such other requirements as may be necessary under the Federal Act.
- b. A permit may be automatically transferred to a new permittee if:
  - i) The current permittee notifies the Division in writing 30 days in advance of the proposed transfer date; and
  - ii) The notice includes a written agreement between the existing and new permittee(s) containing a specific date for transfer of permit responsibility, coverage and liability between them; and
  - iii) The Division does not notify the existing permittee and the proposed new permittee of its intent to modify, or revoke and reissue the permit.
  - iv) Fee requirements of the Colorado Discharge Permit System Regulations, Section 61.15, have been met.

**4. Availability of Reports**

Except for data determined to be confidential under Section 308 of the Federal Clean Water Act and the Colorado Discharge Permit System Regulations 5 CCR 1002-61, Section 61.5(4), all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Division and the Environmental Protection Agency.

The name and address of the permit applicant(s) and permittee(s), permit applications, permits and effluent data shall not be considered confidential. Knowingly making false statement on any such report may result in the imposition of criminal penalties as provided for in Section 309 of the Federal Clean Water Act, and Section 25-8-610 C.R.S.

**5. Modification, Suspension, Revocation, or Termination of Permits By the Division**

The filing of a request by the permittee for a permit modification, revocation and reissuance, termination or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

- a. A permit may be modified, suspended, or terminated in whole or in part during its term for reasons determined by the Division including, but not limited to, the following:
  - i) Violation of any terms or conditions of the permit;
  - ii) Obtaining a permit by misrepresentation or failing to disclose any fact which is material to the granting or denial of a permit or to the establishment of terms or conditions of the permit; or
  - iii) Materially false or inaccurate statements or information in the permit application or the permit.
  - iv) A determination that the permitted activity endangers human health or the classified or existing uses of state waters and can only be regulated to acceptable levels by permit modifications or termination.
- b. A permit may be modified in whole or in part for the following causes, provided that such modification complies with the provisions of Section 61.10 of the Colorado Discharge Permit System Regulations:
  - i) There are material and substantial alterations or additions to the permitted facility or activity which occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit.
  - ii) The Division has received new information which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of different permit conditions at the time of issuance. For permits issued to new sources or new dischargers, this cause includes information derived from effluent testing required under Section 61.4(7)(e) of the Colorado Discharge Permit System Regulations. This provision allows a modification of the permit to include conditions that are less stringent than the existing permit only to the extent allowed under Section 61.10 of the Colorado Discharge Permit System Regulations.
  - iii) The standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or by judicial decision after the permit was issued. Permits may be modified during their terms for this cause only as follows:
    - (A) The permit condition requested to be modified was based on a promulgated effluent limitation guideline, EPA approved water quality standard, or an effluent limitation set forth in 5 CCR 1002-62, § 62 et seq.; and
    - (B) EPA has revised, withdrawn, or modified that portion of the regulation or effluent limitation guideline on which the permit condition was based, or has approved a Commission action with respect to the water quality standard or effluent limitation on which the permit condition was based; and
    - (C) The permittee requests modification after the notice of final action by which the EPA effluent limitation guideline, water quality standard, or effluent limitation is revised, withdrawn, or modified; or
    - (D) For judicial decisions, a court of competent jurisdiction has remanded and stayed EPA promulgated regulations or effluent limitation guidelines, if the remand and stay concern that portion of the regulations or guidelines on which the permit condition was based and a request is filed by the permittee in accordance with this Regulation, within ninety (90) days of judicial remand.
  - iv) The Division determines that good cause exists to modify a permit condition because of events over which the permittee has no control and for which there is no reasonable available remedy.
  - v) The permittee has received a variance.

## PART II

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- vi) When required to incorporate applicable toxic effluent limitation or standards adopted pursuant to § 307(a) of the Federal act.
  - vii) When required by the reopener conditions in the permit.
  - viii) As necessary under 40 C.F.R. 403.8(e), to include a compliance schedule for the development of a pretreatment program.
  - ix) When the level of discharge of any pollutant which is not limited in the permit exceeds the level which can be achieved by the technology-based treatment requirements appropriate to the permittee under Section 61.8(2) of the Colorado Discharge Permit System Regulations.
  - x) To establish a pollutant notification level required in Section 61.8(5) of the Colorado Discharge Permit System Regulations.
  - xi) To correct technical mistakes, such as errors in calculation, or mistaken interpretations of law made in determining permit conditions, to the extent allowed in Section 61.10 of the Colorado State Discharge Permit System Regulations.
  - xii) When required by a permit condition to incorporate a land application plan for beneficial reuse of sewage sludge, to revise an existing land application plan, or to add a land application plan.
  - xiii) For any other cause provided in Section 61.10 of the Colorado Discharge Permit System Regulations.
- c. At the request of a permittee, the Division may modify or terminate a permit and issue a new permit if the following conditions are met:
- i) The Regional Administrator has been notified of the proposed modification or termination and does not object in writing within thirty (30) days of receipt of notification,
  - ii) The Division finds that the permittee has shown reasonable grounds consistent with the Federal and State statutes and regulations for such modifications or termination;
  - iii) Requirements of Section 61.15 of the Colorado Discharge Permit System Regulations have been met, and
  - iv) Requirements of public notice have been met.
- d. Permit modification (except for minor modifications), termination or revocation and reissuance actions shall be subject to the requirements of Sections 61.5(2), 61.5(3), 61.6, 61.7 and 61.15 of the Colorado Discharge Permit System Regulations. The Division shall act on a permit modification request, other than minor modification requests, within 180 days of receipt thereof. Except for minor modifications, the terms of the existing permit govern and are enforceable until the newly issued permit is formally modified or revoked and reissued following public notice.
- e. Upon consent by the permittee, the Division may make minor permit modifications without following the requirements of Sections 61.5(2), 61.5(3), 61.7, and 61.15 of the Colorado Discharge Permit System Regulations. Minor modifications to permits are limited to:
- i) Correcting typographical errors; or
  - ii) Increasing the frequency of monitoring or reporting by the permittee; or
  - iii) Changing an interim date in a schedule of compliance, provided the new date of compliance is not more than 120 days after the date specific in the existing permit and does not interfere with attainment of the final compliance date requirement; or
  - iv) Allowing for a transfer in ownership or operational control of a facility where the Division determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittees has been submitted to the Division; or
  - v) Changing the construction schedule for a discharger which is a new source, but no such change shall affect a discharger's obligation to have all pollution control equipment installed and in operation prior to discharge; or

- vi) Deleting a point source outfall when the discharge from that outfall is terminated and does not result in discharge of pollutants from other outfalls except in accordance with permit limits.
- f. When a permit is modified, only the conditions subject to modification are reopened. If a permit is revoked and reissued, the entire permit is reopened and subject to revision and the permit is reissued for a new term.
- g. The filing of a request by the permittee for a permit modification, revocation and reissuance or termination does not stay any permit condition.
- h. All permit modifications and reissuances are subject to the antibacksliding provisions set forth in 61.10(e) through (g).

## **6. Oil and Hazardous Substance Liability**

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject to under Section 311 (Oil and Hazardous Substance Liability) of the Clean Water Act.

## **7. State Laws**

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority granted by Section 510 of the Clean Water Act. Nothing in this permit shall be construed to prevent or limit application of any emergency power of the division.

## **8. Permit Violations**

Failure to comply with any terms and/or conditions of this permit shall be a violation of this permit. The discharge of any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of the permit. Except as provided in Part I.D and Part II.A or B, nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance (40 CFR 122.41(a)(1)).

## **9. Property Rights**

The issuance of this permit does not convey any property or water rights in either real or personal property, or stream flows, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

## **10. Severability**

The provisions of this permit are severable. If any provisions of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances and the application of the remainder of this permit shall not be affected.

## **11. Renewal Application**

If the permittee desires to continue to discharge, a permit renewal application shall be submitted at least one hundred eighty (180) days before this permit expires. If the permittee anticipates there will be no discharge after the expiration date of this permit, the Division should be promptly notified so that it can terminate the permit in accordance with Part II.B.5.

## **12. Confidentiality**

Any information relating to any secret process, method of manufacture or production, or sales or marketing data which has been declared confidential by the permittee, and which may be acquired, ascertained, or discovered, whether in any sampling investigation, emergency investigation, or otherwise, shall not be publicly disclosed by any member, officer, or employee of the Commission or the Division, but shall be kept confidential. Any person seeking to invoke the protection of this Subsection (12) shall bear the burden of proving its applicability. This section shall never be interpreted as preventing full disclosure of effluent data.

**13. Fees**

The permittee is required to submit payment of an annual fee as set forth in the 2005 amendments to the Water Quality Control Act. Section 25-8-502 (l) (b), and the Colorado Discharge Permit System Regulations 5 CCR 1002-61, Section 61.15 as amended. Failure to submit the required fee when due and payable is a violation of the permit and will result in enforcement action pursuant to Section 25-8-601 et. seq., C.R.S. 1973 as amended.

**14. Duration of Permit**

The duration of a permit shall be for a fixed term and shall not exceed five (5) years. Filing of a timely and complete application shall cause the expired permit to continue in force to the effective date of the new permit. The permit's duration may be extended only through administrative extensions and not through interim modifications.

**15. Section 307 Toxics**

If a toxic effluent standard or prohibition, including any applicable schedule of compliance specified, is established by regulation pursuant to Section 307 of the Federal Act for a toxic pollutant which is present in the permittee's discharge and such standard or prohibition is more stringent than any limitation upon such pollutant in the discharge permit, the Division shall institute proceedings to modify or revoke and reissue the permit to conform to the toxic effluent standard or prohibition.

**16. Effect of Permit Issuance**

- a. The issuance of a permit does not convey any property rights or any exclusive privilege.
- b. The issuance of a permit does not authorize any injury to person or property or any invasion of personal rights, nor does it authorize the infringement of federal, state, or local laws or regulations.
- c. Except for any toxic effluent standard or prohibition imposed under Section 307 of the Federal act or any standard for sewage sludge use or disposal under Section 405(d) of the Federal act, compliance with a permit during its term constitutes compliance, for purposes of enforcement, with Sections 301, 302, 306, 318, 403, and 405(a) and (b) of the Federal act. However, a permit may be modified, revoked and reissued, or terminated during its term for cause as set forth in Section 61.8(8) of the Colorado Discharge Permit System Regulations.
- d. Compliance with a permit condition which implements a particular standard for sewage sludge use or disposal shall be an affirmative defense in any enforcement action brought for a violation of that standard for sewage sludge use or disposal.